

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-6 (Canceled).

Claim 7 (Currently Amended): An information storage method for a mobile communications network in which a mobile terminal receives information through a plurality of delivery channels, wherein

~~when in response to~~ a delivery channel through which the information is delivered to the mobile terminal ~~[[is]]~~ being switched to another as the mobile terminal moves from a communication area to another, ~~communication nodes in the delivery channels store a~~ communication node in a delivery channel through which the information has been delivered to the mobile terminal registers a portion of the information which has been ~~delivered through the communication nodes stored therein.~~

Claim 8 (Currently Amended): The information storage method as claimed in claim 7, wherein

~~the communication nodes which store~~ node which registers the portion of the information ~~manage~~ manages a relation between information to be delivered to the mobile terminal and the portion of the information stored.

Claim 9 (Currently Amended): ~~The~~ A control method of information delivery for a mobile communications network having a cache node in which a portion of the information is registered in accordance with the information delivery information storage method claimed in claim 7, wherein, if there is a first communication cache node storing said portion of said ~~cache information therein is included~~ in which a portion of the information is registered in a

delivery channel which is established in response to an information delivery request from a mobile terminal, ~~said the~~ first cache node delivers ~~said the~~ portion of ~~said the~~ ~~communication~~ cache information to ~~said the~~ mobile terminal.

Claim 10 (Currently Amended): The control method of information delivery as claimed in claim 9, wherein, if a second communication node is included in ~~said the~~ delivery channel established in response to an information delivery request, ~~said the~~ first communication node informs ~~said the~~ second communication node that ~~said the~~ first cache node has delivered a portion of ~~said the~~ information, and ~~said the~~ second communication node delivers a remaining portion of ~~said the~~ information except for the portion which has been delivered by ~~said the~~ first cache node to ~~said the~~ mobile terminal through ~~said the~~ delivery channel.

Claim 11 (Currently Amended): A control system for information delivery including a plurality of cache nodes storing portions of cache information utilizing the information storage method claimed in claim 7, wherein, if there is a first cache node ~~storing a portion of~~ ~~said cache information is included~~ in which a portion of the information is registered in the delivery channel established in response to ~~said the~~ information delivery request from a mobile terminal, ~~said the~~ first cache node delivers ~~said the~~ portion to ~~said the~~ mobile terminal.

Claim 12 (Currently Amended): The control system for information delivery as claimed in claim 11, wherein a second cache node storing ~~all or~~ a portion of ~~said the~~ requested information exists in ~~said the~~ delivery channel established in response to ~~said the~~ information delivery request, further comprising:

~~means for informing the first cache node informs said the~~ second cache node that ~~said~~ the first cache node has delivered ~~all or said the~~ portion of ~~said the~~ requested information; and
~~means for delivering, the second cache node delivers,~~ through ~~said the~~ delivery channel established-in response to ~~said the~~ information delivery request, the remaining portion of ~~said the~~ information except for ~~said the~~ portion of ~~said the~~ cache information which is delivered from ~~said the~~ first cache node to ~~said the~~ mobile terminal.

Claim 13 (Withdrawn): A communication node apparatus which exchanges information with other communication node apparatuses in a mobile communications network, comprising:

a control register unit which stores entry data therein; and
a network control unit which stores, in response to a hand-over request from a mobile terminal, entry data of said mobile terminal in said control register unit if said control register unit does not store said entry data of said mobile terminal.

Claim 14 (Withdrawn): The communication node as claimed in claim 13, wherein said network control unit, if said control register stores said entry data of said mobile terminal therein, sends to one of said other communication node apparatuses an instruction, in response to which the one of said network node apparatuses deletes an entry data of said mobile terminal stored in a control register unit thereof.

Claim 15 (Withdrawn): The communication node as claimed in claim 13, further comprising a cache data storage unit which stores cache data therein,
wherein

said network control unit, in response to a delivery request for information from said mobile terminal, if said cache data is equal to said information, sends to one of said communication node apparatuses a first signal indicating that said cache data storage unit stores said cache data therein; and

said network control unit, in response to a second signal from the one of said communication node apparatuses indicating that a portion of said information has been sent to said mobile terminal, sends a remaining portion of said cache data identical to said information stored in said cache data storage unit.

Claim 16 (Withdrawn): The communication node as claimed in claim 15, wherein said network control unit sends to a network node a second signal indicating that a portion of said cache data is sent to said mobile terminal.

Claim 17 (Withdrawn): The communication node as claimed in claim 15, wherein a portion of said information passing through said communication node is stored in said cache data storage unit thereof and managed by a stored data control table indicating a relationship between a name of cache data and a stored portion of said cache data.

Claim 18 (Previously Presented): A method of delivering information to a mobile terminal through a mobile communication network including a plurality of communication nodes, the method comprising the steps of:

identifying a first cache node caching the information in a first delivery channel established based on a delivery request for the information from the mobile terminal;

identifying a second cache node caching the information in a second delivery channel established as the mobile terminal moves;

sending delivery information from the first cache node to the second cache node, the delivery information indicating a portion of the information that has been delivered to the mobile terminal by the first cache node; and

delivering a remaining portion of the information from the second cache node in response to receipt of the delivery information.

Claim 19 (Previously Presented): The method as claimed in claim 18, wherein in the step of sending delivery information, a communication node located in the first delivery channel and the second delivery channel acquires the delivery information from the first cache node and transfers the acquired delivery information to the second cache node.

Claim 20 (Previously Presented): The method as claimed in claim 18, wherein when the mobile terminal receiving the information through the first delivery channel is handed over from a first wireless communication node to a second wireless communication node, the second delivery channel including the second wireless communication node is established and the second cache node in the second delivery channel is identified.

Claim 21 (Previously Presented): A mobile communication network, comprising:
a mobile terminal;
a server that stores information; and
a plurality of cache nodes that caches at least a portion of the information stored in the server, wherein

a first one of the cache nodes in a first delivery channel established based on a delivery request from the mobile terminal for the information stored in the server sends delivery information to a second one of the cache nodes in a second delivery channel

established as the mobile terminal moves, the delivery information indicating a portion of the information that has been delivered to the mobile terminal by the first one of the cache nodes, and

the second one of the cache nodes delivers a remaining portion of the information in response to receipt of the delivery information from the first one of the cache nodes.

Claim 22 (Previously Presented): The mobile communication network as claimed in claim 21, further comprising:

a plurality of communication nodes, wherein

a communication node located at a diverging point of the first delivery channel and the second delivery channel acquires the delivery information from the first one of the cache nodes via the first delivery channel and transfers the acquired delivery information to the second one of the cache nodes via the second delivery channel.

Claim 23 (Previously Presented): The mobile communication network as claimed in claim 21, further comprising:

a plurality of wireless communication nodes that wirelessly communicates with the mobile terminal, wherein

when the mobile terminal receiving the information through the first delivery channel is handed over from a first one of the wireless communication nodes to a second one of the wireless communication nodes, the second delivery channel is formed and the second one of the cache nodes is identified.